Tebis Configurator TX 100

User manual

6T 7157a

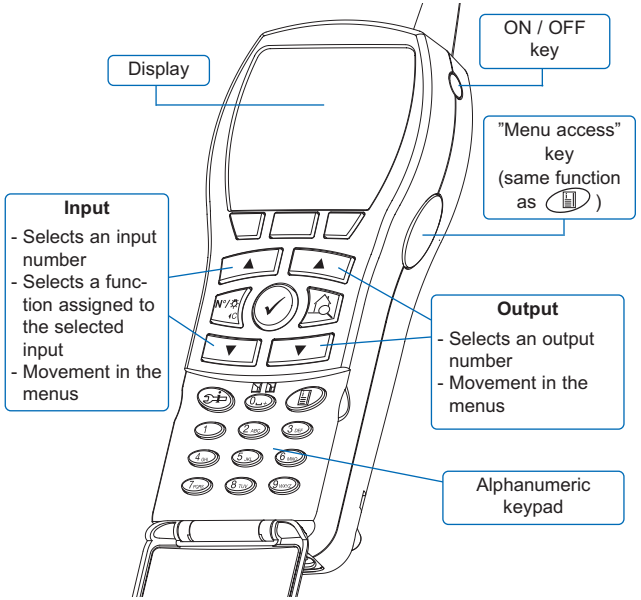
The Tebis devices have been now installed. All of the electrical cables have been checked. The electrical loads (lights, shutters ...) are in place and connected. You only need to establish the links between the inputs and the outputs, and you can then operate the installation.

The Tebis TX100 portable configurator is a configuration tool intended for establishing these links for the entire range of Tebis devices:

- Twisted-pair devices
- RF bidirectional devices
- RF unidirectional devices

ⓘ This tool is only used during the installation configuration phase. It has no role to play in normal operation of the installation.

Description of the keys


Display
ON / OFF key
"Menu access" key (same function as)
Input
- Selects an input number
- Selects a function assigned to the selected input
- Movement in the menus
Output
- Selects an output number
- Movement in the menus
Alphanumeric keypad

Screen keys
The function of each key is indicated on the screen above it. The function varies depending on the screen

- Confirms the current operation
- Selects a menu
- Confirms the entry

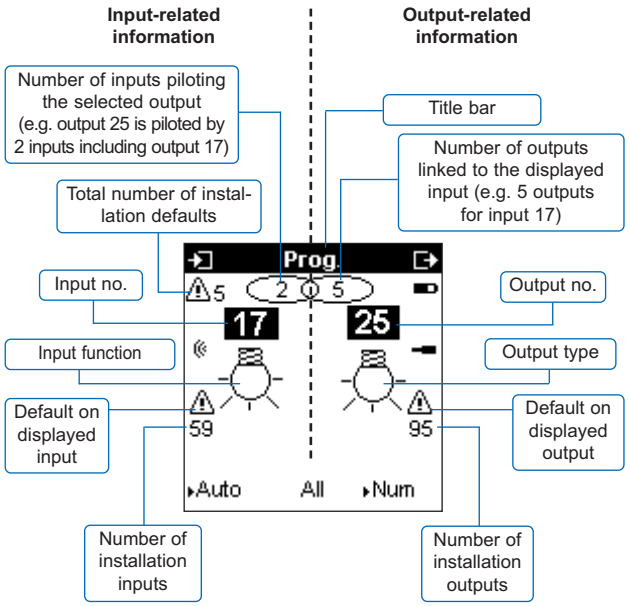
- Changes the function of the left keys (selection of an input number or function)
- Returns to the previous menu

- Activates the selected output
- Starts numbering of the installation outputs

Access to the installation help screens

Menu access

Description of the display



Battery load level

Output

Input

RF device

Twisted-pair device

Preparation of a link

Established link

Deletion of a link

Sounds

- A single "beep sound" indicates a successful operation
- A double "beep sound" indicates an operation that has failed

Definitions

- **Channel:** designates an input or an output.
- **Unidir:** designates an emitting input device or channel. "Unidir" channels cannot receive information from the other channels in the installation.
- **Bidir :** designates an emitting/receiving device or channel. All of the output channels are "bidir".
- **Twisted-pair:** designates a device or channel that is linked to the twisted-pair bus.

Technical specifications

Device power supply:	4 rechargeable batteries or 4 AA dry-cell batteries
Rechargeable batteries:	Ni-Mh 1.2V 1550mA/h (min.)
Dry-cell batteries:	Alcaline 1.5V LR6
External charge:	Via a 230V / 9V, 1A (min.) transformer
Consumption during charge:	0.2A (for mains loading)
Operation life:	- Batteries charged in the tool: 8h - Batteries charged outside of the tool:6h - New dry-cell batteries: 10h
Charge time:	3h30min
Central frequency:	868.3 MHz
Emission power:	5 dBm (min.)
Reception sensitivity:	-100 dBm (min.)
Emission speed:	16384 bauds
Duty Cycle :	1%
Memory card:	SmartMedia 8-64 MB
Operating temperature:	0°C - +45°C
Storage temperature:	-20°C - +70°C
Protection index:	IP20
Weight:	340g
Size:	75 x 169 x 34,5 mm (excluding aerial)

Addressing area

- Physical address for twisted-pair devices: 0.2.00 - 0.2.55
- Group addresses: 24/4/00 - 27/7/255 ETS mode deactivated
  10/4/00 - 13/7/255 ETS mode activated (by default)

The system's limits

- 250 RF devices
- 250 twisted-pair devices
- 1024 channels divided into 512 input channels and 512 output channels
- 1 media coupler
- 6 repetition levels in a message

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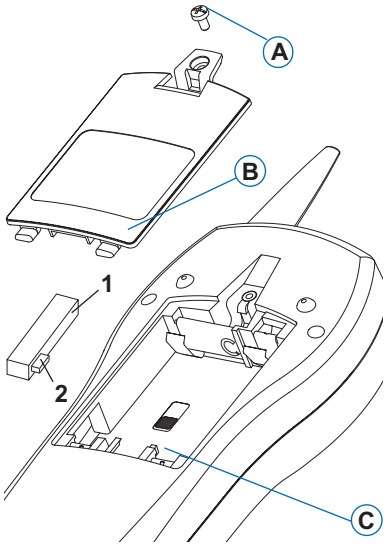
General Information

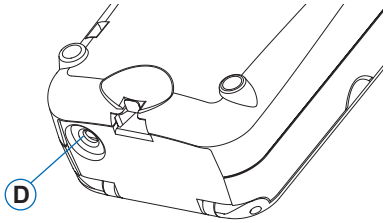
1 Starting-Up

1.1 Inserting rechargeable batteries or dry-cell batteries

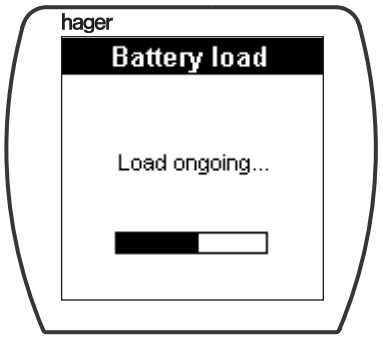


- Remove screw **A**.
- Open cover **B** to access the battery compartment.
- Position switch **C** according to the power supply being used:
  - **Position 1**
    Powered by dry-cell batteries
  - **Position 2 (by default at delivery)**
    Powered by rechargeable batteries (supplied)
- Insert dry-cell batteries or rechargeable batteries ensuring that the polarities are respected, then close and screw down the cover.

1.2 Battery life and load



If you are using rechargeable batteries, connect the mains charger provided to socket **D**.

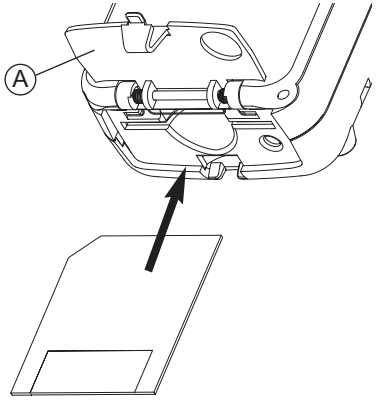


The battery level indicator is displayed during loading.

⚠ If the charger is connected to the device when it is operating on dry-cell batteries and the selection switch is still in the rechargeable battery position, there is a risk of destroying the Tebis TX100 configurator.

⚠ Charge the battery completely before the first use (3h 30min).

1.3 Card reader



- Open flap **A**.
- Insert a smartcard into the configurator in accordance with the figure shown opposite.

⚠ The smartcard must be inserted before the configurator is switched on.

There are 2 types of smartcards:

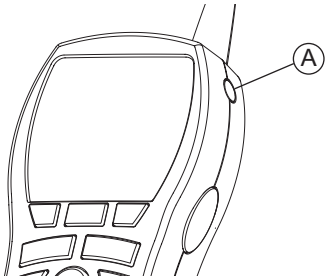
- **Memory card**
  It allows you to save the parameters of an installation.
  - **A memory card is essential for configuring an installation.**
  - **You must use a separate memory card for each installation.**

- **Software update smartcard**
  The software update smartcard allows you to download a new version of the software in order to benefit from the latest improvements to the configurator. Press the **YES** screen key to confirm the software version update; a standby screen is then displayed. Once the update is complete, remove the smartcard and then press the V screen key to restart the configurator with the new version of the software.

ⓘ The software cannot be updated if the battery load level is very low.

General Information

1.4 Switching on / off



• Press the **A** button until the sound signal is activated in order to start or stop the configurator.

A standby screen is displayed for a few seconds.

The installation information contained on the memory card is automatically displayed when the configurator is switched on.

• Press the screen key to move to the next screen.

• Press the screen key to change the card.

1.5 Language selection

When started up for the first time, the configurator displays the screens in English.

To change the language:

• Select the language to be used with the or keys.

• Press the key to confirm your selection.

2 The different installation types

2.1 RF installation

This type of installation only consists of RF devices.

2.2 Twisted-pair installation

This installation only consists of devices connected to the bus.

This installation type requires a media coupler to be installed during the entire configuration phase.

The media coupler can be removed at the end of the configuration procedure.

2.3 Mixed RF / twisted-pair installation

This installation consists of RF devices and devices connected to the bus.

This installation type requires a media coupler to be installed.

The media coupler assures communication between the various devices and must remain in the installation.

General Information

3 The different types of uses

3.1 Configuration

In this use, it is possible to number the outputs and inputs, establish links and visualize all of the established links.
The installation is not operational in this case.
Configuration operations are divided up into three modes.

■ **Numbering Mode (Num)**
This mode allows you to:
- number the inputs
- assign a function to an input
- delete an input and its associated function

■ **Link Establishment Mode (Prog)**
This mode allows you to:
- number the outputs
- locate the outputs
- establish links
- delete links
- visualize the established links

■ **Visualization Mode (Visu)**
This mode allows you to visualize all of the links in an installation.

ⓘ The tool must be placed in the **Auto** mode before you can use or test the installation.

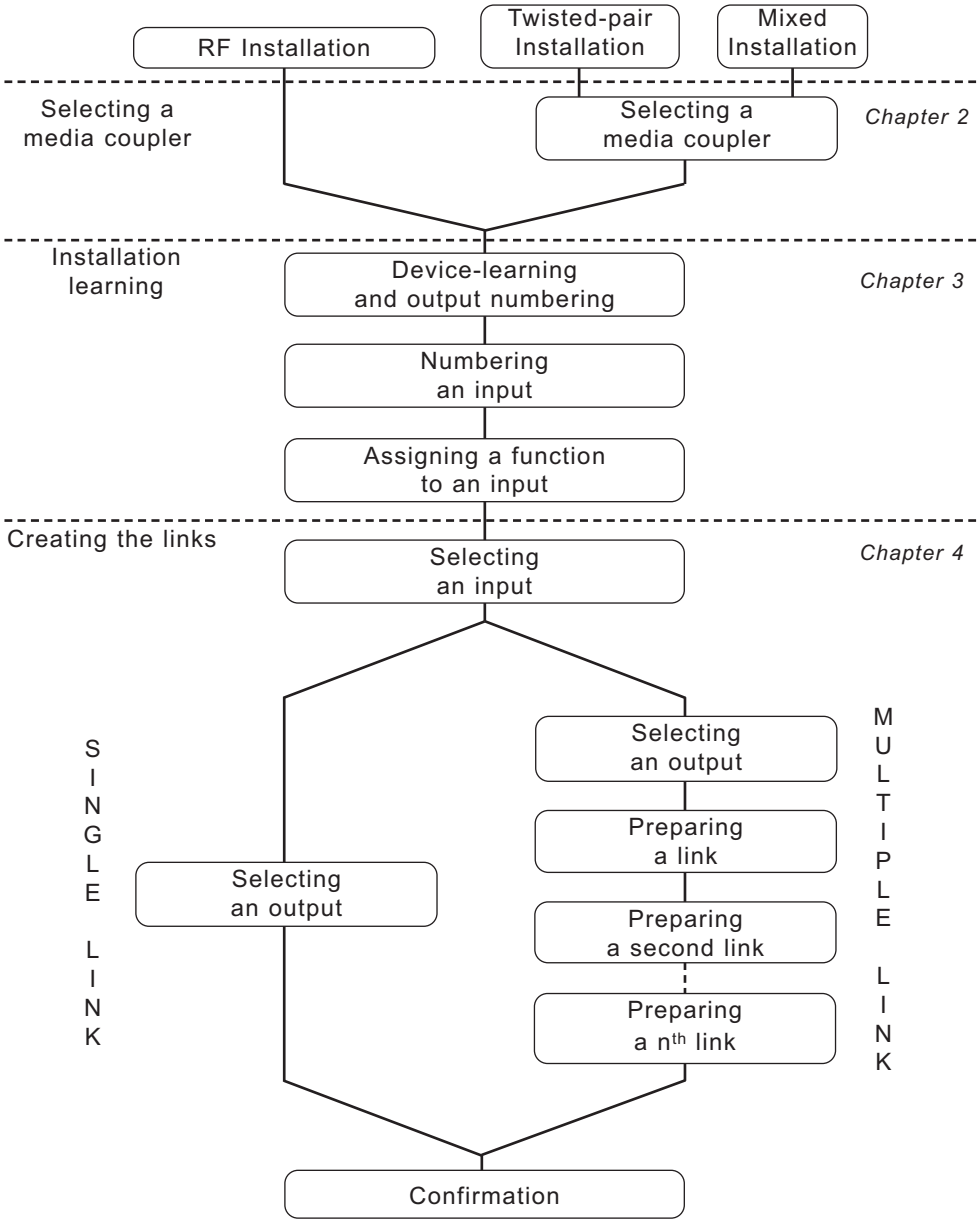
3.2 Management, RF tools and settings

This mode can be accessed by pressing the key or the “menu access” key.
This menu allows you to:
- manage the devices and the installation
- take RF tools and carry out simulations
- configure some of the tool’s functionalities

Configuration

1 Principle

Configuring a new installation consists of the following steps:

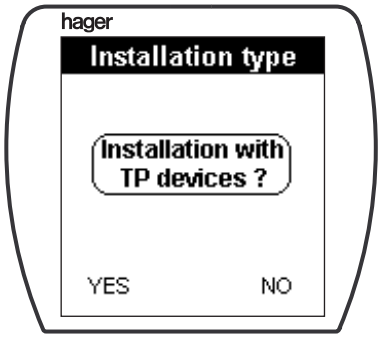


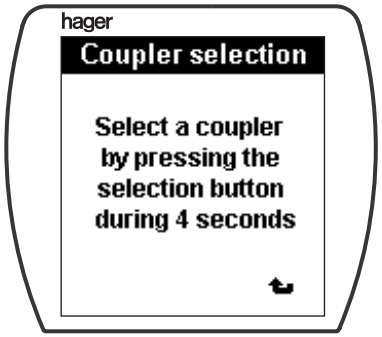
Configuration

2 Selecting a media coupler

A selection sequence must be followed for installations requiring the use of a media coupler (twisted-pair or mixed installations only).

2.1 For a new installation





Once the configurator is switched on, it asks you if the installation consists of twisted-pair devices.
If **YES**, the Coupler Selection screen is then displayed.

- In this case, select the media coupler to be used by pressing its button until the red indicator turns on (4 sec).
- Release the button.

A sound signal is activated when the selection has been made.

- Wait until the **Auto** screen is displayed to continue with the configuration.

⚠ The title bar on the current screen flashes if the configurator is not within RF reach of the media coupler.

2.2 For an already-configured installation

It is not necessary to follow a coupler selection procedure for an already-configured installation unless the coupler has been changed.
The media coupler selected during the initial configuration will be automatically detected and used for the following operations.

2.3 Using the tool coupler

It is possible to always use the same media coupler for configuring twisted-pair installations. This coupler can be designated as the “tool coupler”.
Once it has been selected (*cf. Tool / Settings / Tool Coupler Selection menu*), it will be automatically recognised when the configurator is switched on.

3 Device-learning

3.1 Device-learning and output numbering

The configurator must know the inputs and the outputs present in the installation before any links can be established. The procedure shown below enables:
- Learning of the outputs
- Automatic assignment of a number to each output channel
- Learning of the “bidir” and twisted-pair inputs

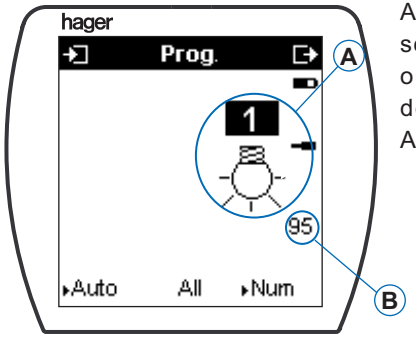
ⓘ This operation is essential prior to input numbering

Select the **Prog** mode.

- Hold down the key to start automatic output numbering.

The configurator automatically searches for all outputs present in the installation.

ⓘ This operation lasts for 1 to 10 minutes depending on the number of devices present in the installation.



At the end of the device-learning phase, the screen displays the characteristics of the first output **A** as well as the number of outputs detected **B**.
All of the outputs are then numbered.

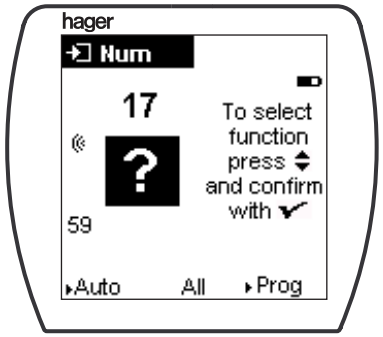
Configuration

3.2 Numbering an input and assigning a function

In order to be able to number all of the inputs, the *device-learning and output numbering* procedure must be carried out first (see previous page).

Select the **Num** (numbering) mode.

Assigning the number



Selecting the function

RF bidirectional and twisted-pair devices

- Press the push-button or toggle the switch that is connected to the input to be numbered.

The configurator automatically assigns a number to it.

- Press the N°/✲ key to assign a function to this input.
- Select the function from the proposed functions with the left keys.

A complete list of functions and associated symbols is available in Appendix 1.

- Press the ✓ key to confirm the selected function.

The central screen key facilitates function selection by allowing you to activate a function filter to limit scrolling to a family of functions. The **All** function corresponds to scrolling all of the functions.

RF unidirectional devices

- Press the push-button or toggle the switch that is connected to the input to be numbered.
- Place the configurator within immediate reach of the input to be numbered.
- Press the **Learn** screen key.
- Hold down the key that corresponds to the input to be numbered.

A sound signal is activated when the input has been detected. The configurator automatically assigns a number to it.

- Press the N°/✲ key to assign a function to the input.
- Select the function from the proposed functions with the left keys.

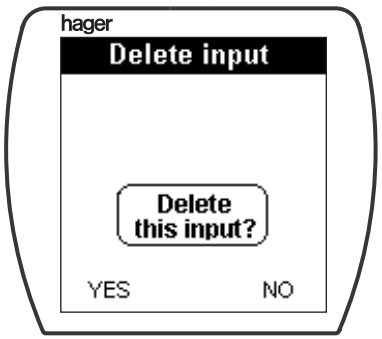
A complete list of functions and their symbols is available in Appendix 1.

- - Press the ✓ key to confirm the selected function.

A sound signal confirms that the function has been loaded.

- The central screen key facilitates function selection by allowing you to activate a function filter to limit scrolling to a family of functions. The **All** function corresponds to scrolling all of the functions.
- The numbers are assigned in ascending order starting from 1.
- To find the number assigned to a channel, you just have to activate it.

3.3 Deleting an input

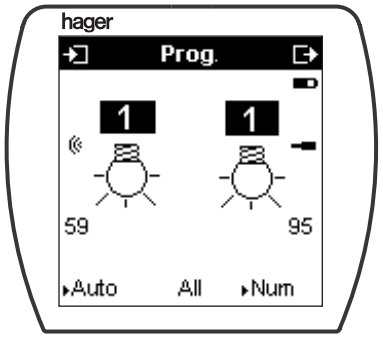


- Select the input to be deleted, either:
  - With the left keys.
  - By pressing the button that corresponds to the input.
- Hold down the N°/✲ key.
- Press the **YES** screen key to confirm deletion of the input.

The numbers deleted during this operation will be reassigned in priority during one of the following numbering procedures.

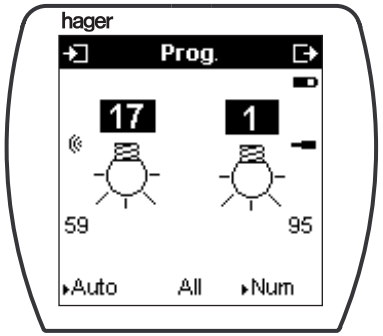
Configuration

4 Creating and managing the links



The configurator now knows the output and input channels. The link establishment phase can now begin. Select the **Prog** mode to establish the links.

4.1 Creating a simple link



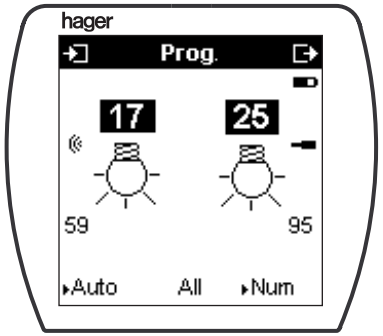
■ Selecting an input

• Press the left keys to display the input to be linked.

Or

• Press the push-button or the switch corresponding to the input to be linked.

The number and the function of this input are then displayed.



■ Selecting an output

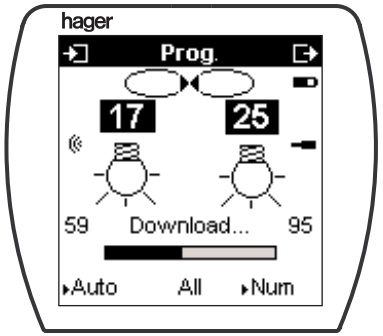
• Press the right keys to display the output to be linked.

Or

If the output number is not known, there are 2 possibilities available for physically locating the output:

➜ Briefly pressing the key allows you to directly control the output displayed on the configurator. For ON/OFF lighting, for example, pressing the key once turns on the lamp corresponding to the output displayed on the configurator and pressing it again turns it off. In the case of twisted pair devices, the LED for the channel corresponding to the output displayed on the configurator is turned on (only if in the manual position on the output module).

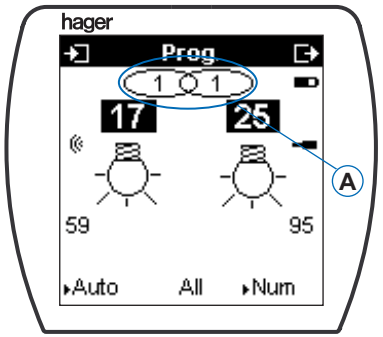
➜ For devices equipped with a push-button, pressing the push-button displays the corresponding number on the configurator. The indicator associated to the selected channel is then turned on.



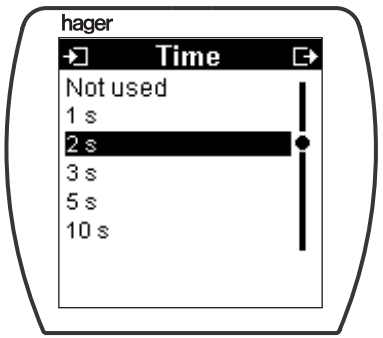
■ Confirming a link

• Hold down the key to confirm the link.

The characteristics of the link are saved in the output channel, the input channel and on the memory card in the configurator.



Once the characteristics of the link have been saved, the symbol shown by **A** confirms that the link has been established.



■ Inputting a possible parameter

Certain functions require a parameter (e.g. lighting time delay) to be input.

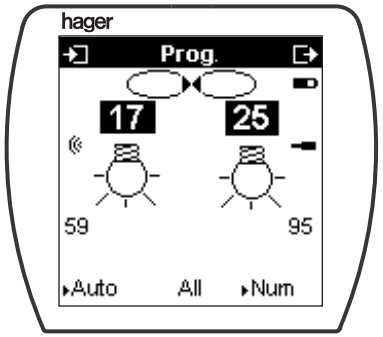
• Hold down the key to display the list of parameters that are compatible with the selected function.

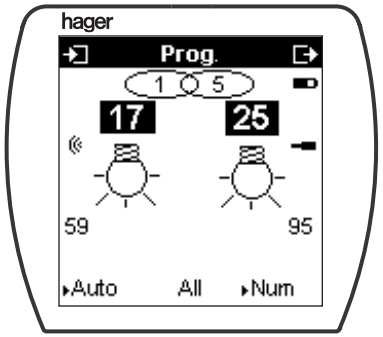
• Press the or keys to select or set the parameter.

• Press the key to confirm and save the link.

4.2 Creating a multiple link

The system allows you to link an input to several outputs. The steps are identical to those followed when creating a simple link but the procedure is different:

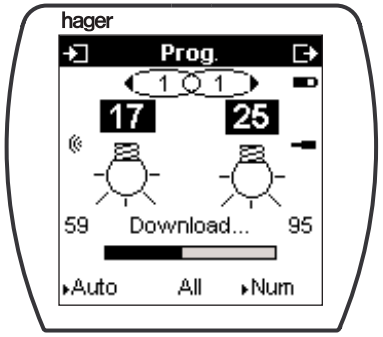




- Select an input.
- Select an output.
- Prepare the link by briefly pressing the ✓ key.
- Select another output.
- Prepare the link by briefly pressing the ✓ key again.
- Repeat the procedure for each new output to be linked.
- When all of the links have been prepared, confirm the links by holding down the ✓ key. The configurator then invites you to input a parameter if required (timer duration...). This parameter will be identical for all of the outputs.

Once the link has been saved, the right ring (5) indicates the number of outputs linked to the current input.

4.3 Deleting a link

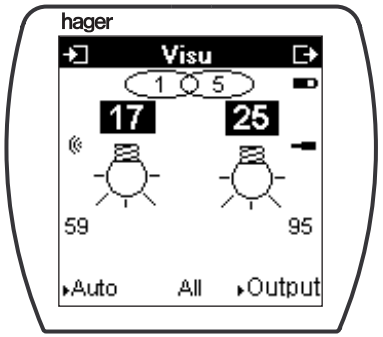


- Select the appropriate input and output to display the link to be deleted.
- Hold down the ✓ key to delete the link.

In order to delete a multiple link, you have to delete the links for each output.

5 Visualizing the links

Press the **Visu** screen key to select the visualization mode.



This mode allows you to see all of the links in an installation.

The links can be visualized:

- Via the inputs, by selecting the no. or by directly pressing the button corresponding to an input. Use the right keys to scroll the outputs linked to the current input.
- Via the outputs, by selecting the no. or by directly pressing the button corresponding to an output (if the output is associated with one). Use the left keys to scroll the inputs linked to the current output.

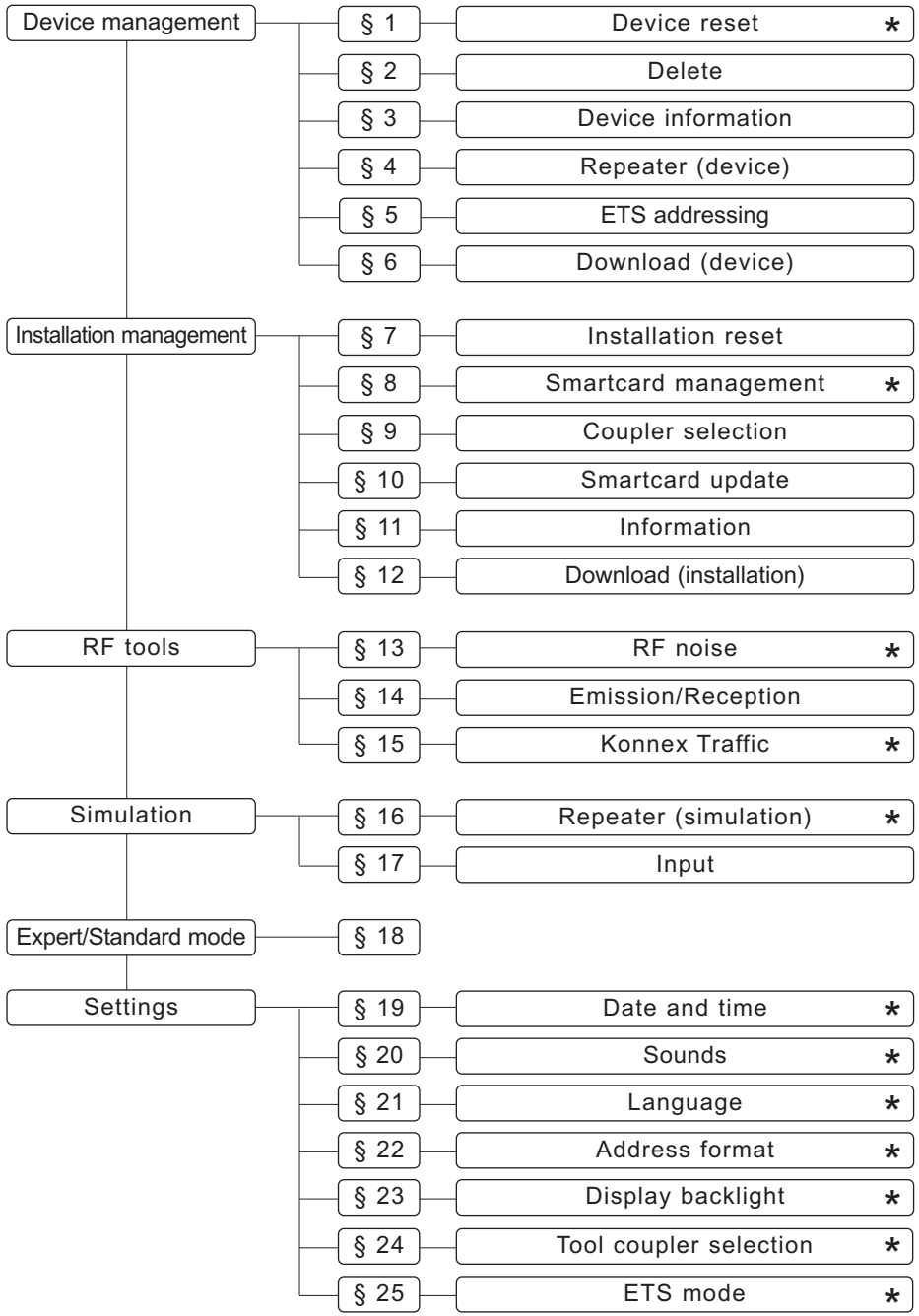
Management, RF tools and settings

In this use of the configurator, it is possible to access all of the measurement, simulation and setting management functions.
To access these functions:

- Press the key or the “menu access” key to display the menu.
- Select the desired function with the or keys.
- Confirm with the keys.

The key allows you to return to the previous menu.

The menu allows you to access the functions indicated on the next page.

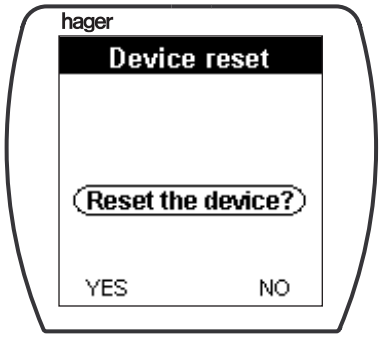


Management, RF tools and settings

1 Device reset

Device management
→ Device reset

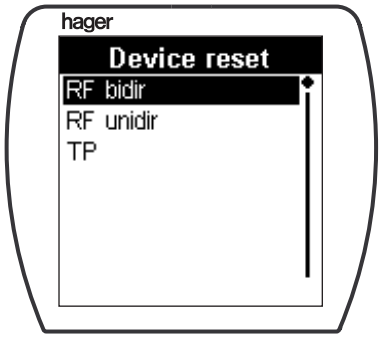
This function allows you to return a device to its factory configuration.



■ **Product in the current installation**

The list of known devices in the installation is displayed:

- Select a device from this list, either:
  - With the ▲ or ▼ keys.
  - By pressing the button corresponding to an input.
  - By pressing the button corresponding to the output channel, if it exists.
- Press the ✓ keys.
- Press the **YES** screen key to confirm the "device reset".



■ **Device not belonging to the installation (Not instal. device)**

- Select “Not instal. device”.
- Press the ✓ key to confirm.
- Select the device type in the proposed menu.
- Follow the instructions indicated by the configurator.

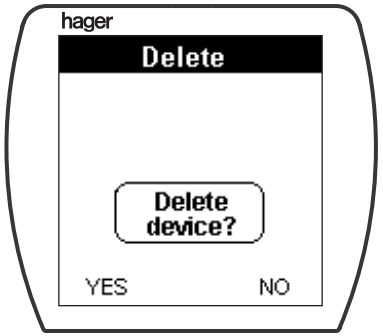
ⓘ All of the links and parameters are erased from the device after confirmation.

ⓘ Re-learning will be required before the device can be configured again.

2 Delete

Device management
→ Delete

This function allows you to remove a device saved on the memory card without returning the configurator to its factory configuration.



- Select a device from the list, either:
  - With the ▲ or ▼ keys.
  - By pressing the button corresponding to an input.
  - By pressing the button corresponding to the output channel, if it exists.
- Press the ✓.
- Press the **YES** screen key to confirm the “deletion”.

ⓘ A “device reset” then re-learning will be required before the device can be configured again.

3 Device information

Device management
→ Device information

This function allows you to visualize the main characteristics of a device present in the installation.
A list of the devices present in the installation is displayed:

- Select a device from this list, either:
  - With the ▲ or ▼ keys.
  - By pressing the button corresponding to an input.
  - By pressing the button corresponding to the output channel, if it exists.
- Press the ✓ key.

The characteristics are then displayed.

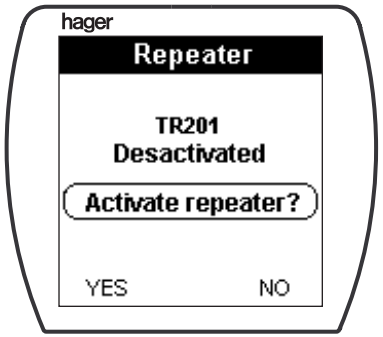
- Press the V screen key to return to the list of devices.

ⓘ In the shutter or blind modules, the **PARAM** screen key allows you to access the screen where you can select the complete ramp-up time for the shutter or the blind.

Management, RF tools and settings

4 Repeater (device)

Device management
→ Repeater

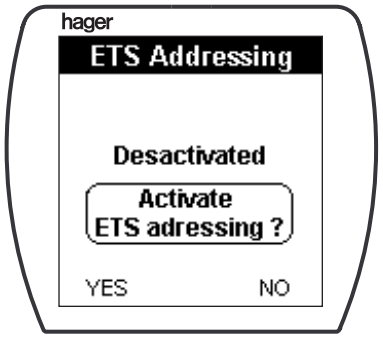


This function allows you to activate or deactivate the repeater function in an RF bidirectional device. A list of the RF bidirectional devices present in the installation is displayed:

- Select a device from this list, either:
  - With the ▲ or ▼ keys.
  - By pressing the button corresponding to an input.
- Press the ✓ key.
- Press the **YES** screen key to confirm activation or deactivation of the "repeater" function.

5 ETS Addressing

Device management
→ ETS addressing



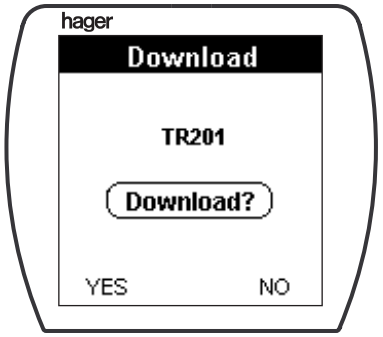
This function allows you to:
- Place a twisted-pair or RF bidirectional device in the physical addressing mode (for use with ETS).
- Activate emission by an RF unidirectional device of the information necessary for configuring the devices to ETS.

A list of the devices in the installation is then displayed:

- Select a device from the list, either:
  - With the ▲ or ▼ keys
  - By pressing the button corresponding to an input.
  - By pressing the button corresponding to the output channel, if it exists.
- Press the ✓ key.
- Press the **YES** screen key to activate the “Prog mode”.

6 Download (device)

Device management
→ Download

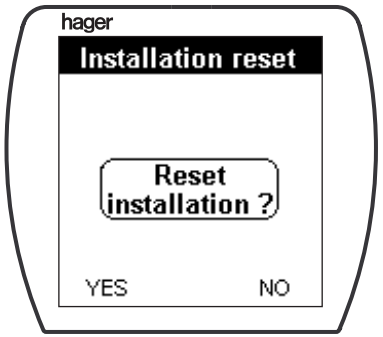


This function allows you to force downloading of a device.

- Select a device from the list, either:
  - With the ▲ or ▼ keys.
  - By pressing the button corresponding to an input.
  - By pressing the button corresponding to the output channel, if it exists.
- Press the ✓ key.
- Press the **YES** screen key to confirm the "download“.

7 Installation reset

Instal. management
→ Installation reset



This function allows you to reset all of the twisted-pair and RF bidirectional devices in the installation. These devices are returned to their factory configuration.
The unidirectional devices have to be reset individually (see *1. Device-reset*).

- Press the **YES** screen key to confirm the “installation reset”.

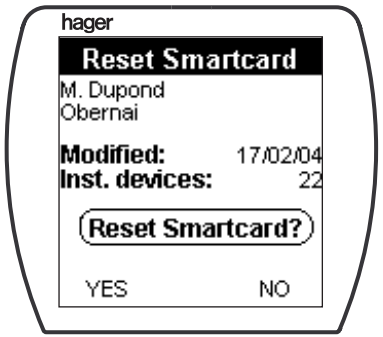
ⓘ Re-learning will be required before the installation can be configured again.

Management, RF tools and settings

8 Smartcard

Instal. management
→ Smartcard

This function allows the user to erase or copy the contents of a memory card.



Erasing the smartcard

- Press the **YES** screen key to erase the smartcard.

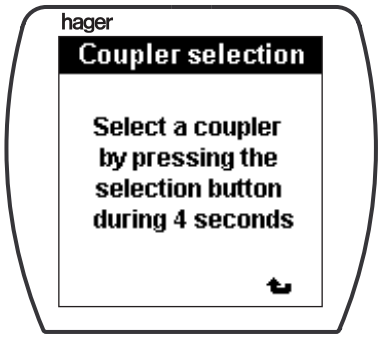
Copying the smartcard

- Insert the original smartcard to be copied.
- Press the ✓ screen key to read the smartcard.
- Insert a new smartcard.
- Press the ✓ screen key to copy the installation parameters.

9 Coupler selection

Instal. management
→ Coupler selection

This function allows you to select a media coupler in an installation.

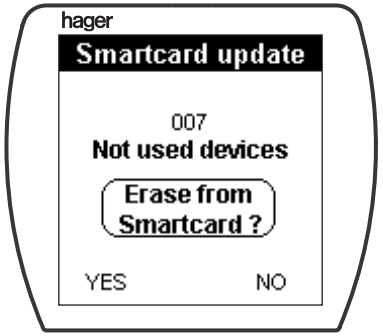


- Select the media coupler to be used by pressing its button until the red indicator turns on (4 sec).
- Release the button.

A sound signal is activated when the selection has been made.

10 Smartcard update

Instal. management
→ Smartcard update



This function allows you to erase the devices not used in the installation from the memory card.
The numbers of products with no links is displayed.

- Press the **YES** screen key to confirm the smartcard update.

The configurator realises a "device reset" for the unused twisted-pair and RF bidirectional devices.
RF unidirectional devices are not concerned by this function.

Management, RF tools and settings

11 Installation information

Instal. management → Installation information

This function provides general information about the installation.

12 Download (installation)

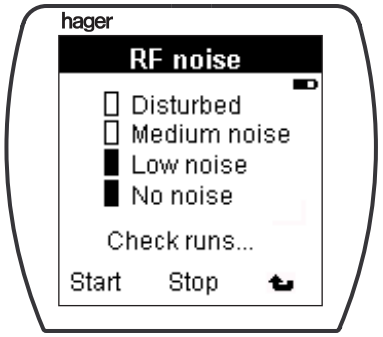
Instal. information → Download

This function allows you to force downloading of the installation.

- Press the **YES** screen key to confirm the installation “download”.

13 RF noise

RF tools → RF noise



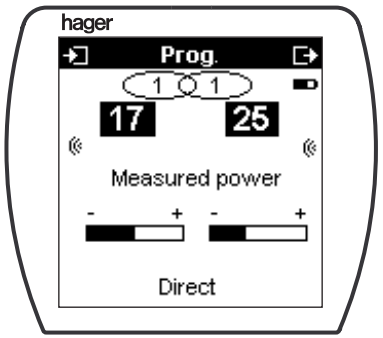
This function allows you to detect any possible RF disruptions using the same frequency band as the devices present in the installation.
A measuring cycle starts as soon as the function is selected.
At the end of the cycle, the configurator displays the noise level and automatically takes a new measurement.

- Press the **Stop** screen key to stop the measuring cycle.
- Press the **Start** screen key to restart the measuring cycle.

ⓘ The ↩ screen key allows you to return to the previous screen.

14 Emission / Reception

RF tools → Emission/Reception



This function allows you to measure the emission power of a radio transmitter and the reception sensitivity of a receiver.
It can only be accessed from the **Prog** menu by pressing the ⊡ key.
The reception sensitivity is displayed either:

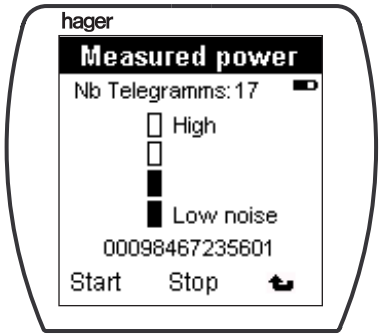
- As a direct measurement from the transmitter to the desired receiver.
- As a repeated signal. In this case, the measurement indicates the sensitivity of the receiver in relation to that of a repeater.

Management, RF tools and settings

15 Konnex Traffic

RF tools → Konnex Traffic

This function allows you to measure the RF level emitted by any Konnex transmitter.



A measuring cycle starts as soon as the function is selected. When each telegram is received, the configurator displays:

- the serial number of the emitting device.
- the signal level.
- the total number of telegrams received since the start of the measuring cycle.
- if necessary, a low-battery alert for the active transmitter.

• Press the **Stop** screen key to stop the measuring cycle.

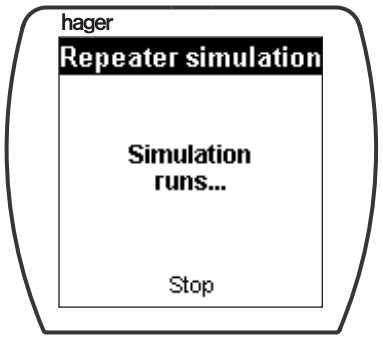
• Press the **Start** screen key to restart the measuring cycle.

ⓘ The ↩ screen key allows you to return to the previous screen.

16 Repeater (simulation)

Simulation → Repeater

This function allows the configurator to simulate the repeater function in order to correctly position a repeater in the installation.

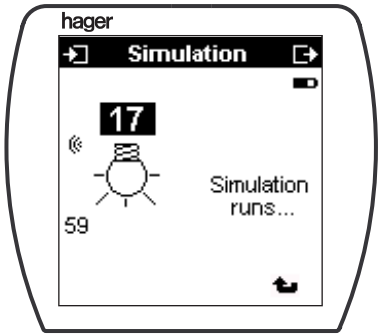


• Press the ✓ key to start the simulation.

• Press the **Stop** screen key to stop it.

17 Input

Simulation → Input



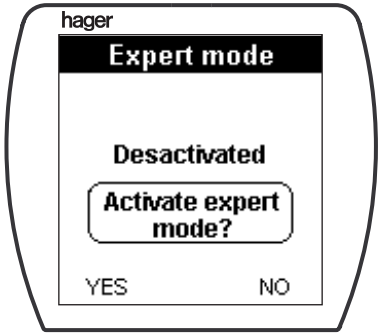
This function allows the configurator to replace an input.
The last input selected in the **Num** or **Prog** mode is displayed.

• Press the ✓ button to simulate the input.

ⓘ The ↩ screen key allows you to return to the previous screen.

18 Expert / Standard mode

Simulation → Expert mode



This function allows you to activate the expert mode. In expert mode, the input and output functions are presented via the objects of communication.

• Press the **YES** screen key to activate or deactivate the expert mode.

Management, RF tools and settings

19 Date and time

Settings → Date and time

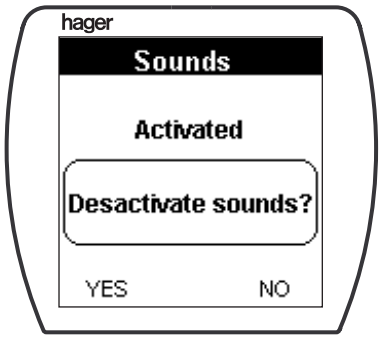
This function allows you to set the date and the time.

- Press the left keys to move from one field to the next.
- Press the right keys to increase or decrease the value of the selected field.
- Press the screen key to confirm.

The screen key allows you to return to the previous screen.

20 Sounds

Settings → Sounds



Activating the sounds allows you to obtain a confirmation beep sound for certain actions.

- Press the **YES** screen key to activate or deactivate “the sounds”.

21 Language

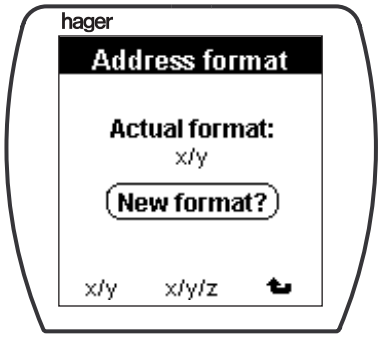
Settings → Language

The language used is selected during the initial start-up.
It is however possible to change it at a later stage.

- Select the language with the or keys.
- Press the key to confirm.

22 Address format

Settings → Address format



This function allows you to set the address format or the input format for group addresses.

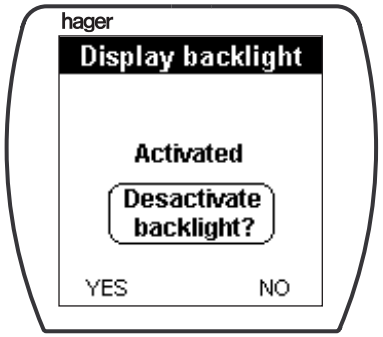
- Press the screen key corresponding to the desired format.

The screen key allows you to return to the previous screen.

Management, RF tools and settings

23 Display backlight

Settings → Display backlight



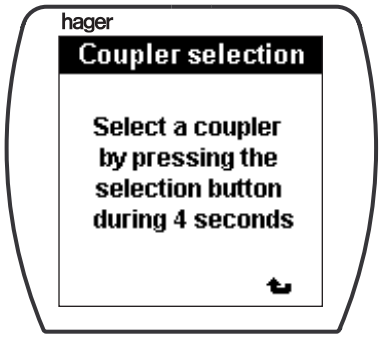
This function allows you to activate or deactivate the display backlight.

- Press the **YES** screen key to activate or deactivate “the display backlight”.

24 Tool coupler selection

Settings → Tool coupler selection

This function allows you to define a media coupler as the tool coupler.

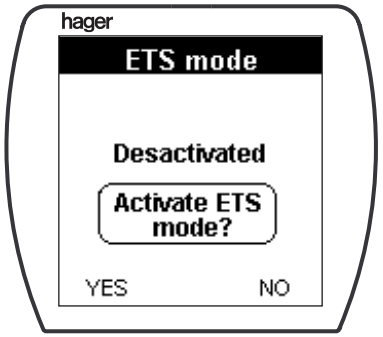


- Select the media coupler to be used by pressing its button until the red indicator turns on (4 sec).
- Release the button.

A sound signal is activated when the selection has been made.

25 ETS mode

Settings → ETS mode



This function allows you to use the RF group addresses in ETS.

- Press the **YES** screen key to activate or deactivate “the ETS mode".

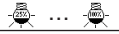
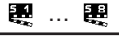
The ETS mode is activated by default. Any installation can therefore be extended with ETS.

⚠ Deactivating the ETS mode changes the addressing area. Installations realised when the ETS mode is deactivated can not be extended.

Reminder of the group addressing areas:

- 24/4/00 - 27/7/255 ETS mode deactivated (addresses can not be reached by ETS).
- 10/4/00 - 13/7/255 ETS mode activated (by default)

Appendix

Application	Symbol	Type of command
Lights		Switching on
		Switching off
		ON / OFF, with switch
		ON / OFF, with remote-control switch
		ON / OFF, with remote-control switch for unidirectional devices
		Increasing the dim level
		Reducing the dim level
		Dim, with push-button
		Priority shutdown
		Priority ON
		Timer ON
		Timer OFF
		Ambience level: 25%, 50%, 75% or 100%
Blinds / Roller shutters		Up, with push-button
		Down, with push-button
		Up / Down status, with push-button
		Priority Up
		Priority Down
		Security for bad weather
Heating		Comfort
		Eco
		Comfort / Eco
		Frost-free
		Priority OFF
		Priority comfort
		Priority Eco
		Timer-controlled Comfort
		Time-controlled Eco
Timer		Master timer
		Slave timer
		Up / Down Function, with switch
		Down / Up Function, with switch
		Up Function, with switch
		Down Function, with switch
Dusk-to-dawn switch		Master dusk-to-dawn switch
		Slave dusk-to-dawn switch
Ambience controller		Display area on the ambience controller (1 - 4)
		Logic function
All applications	?	No function
		Ambience level: 1 to 8

Notes

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Hager Tehalit Systèmes SAS
132 Boulevard d'Europe
BP 78
F-67212 Obernai Cedex
FRANCE
www.hager.com